

**Environmental Management Site Specific Advisory Board Chairs Meeting
Draft Meeting Summary
September 22 – 23, 2005
Idaho Falls, Idaho**

The Environmental Management (EM) Site Specific Advisory Board (SSAB) met September 22-23, 2005 at the Ameritel Hotel in Idaho Falls, Idaho. The Idaho National Laboratory Site EM Citizens Advisory Board (CAB) hosted the meeting. Meeting participants included Chairs, Vice Chairs, Co-Chairs, other SSAB members, Department of Energy (DOE) Headquarters (HQ) and field staff, site coordinators, SSAB administrators, and support staff. The meeting was facilitated by Wendy Green Lowe, facilitator for the Idaho CAB. A large majority of the meeting attendees also participated in a tour of the Idaho site on September 21, 2005.

Participants

- Fernald CAB: Lisa Crawford, Pam Dunn
- Hanford Advisory Board: Shelly Cimon, Susan Leckband, Todd Martin
- Idaho National Laboratory Site EM CAB: John Bolliger, Georgia Dixon, David Kipping
- Nevada Test Site Community Advisory Board: David Hermann, John Pawlak, Charles Phillips
- Northern New Mexico CAB: James Brannon, J.D. Campbell, Grace Perez
- Oak Ridge SSAB: Norman Mulvenon, Kerry Trammell
- Paducah CAB: Shirley Lanier, Rhonda McCorry, John Russell
- Rocky Flats CAB: Gerald DePoorter, Phil Tomlinson
- Savannah River Site CAB: Bill Lawless, Jean Sulc
- DOE-HQ: Doug Frost, Christine Gelles, Frank Marcinowski, Melissa Nielson, Jay Vivari
- Federal Officials/Coordinators/Staff: Gary Stegner, Erik Olds, Joe Voice, Kelly Snyder, Christine Houston, Lorrie Bonds-Lopez, David Adler, , Gerri Flemming, Shannonn Brennan, Rick Provencher
- Support Staff: Carla Sanda, Menice Manzanares, Jeannie Brandstetter, Ken Korkia, Dawn Haygood, Peggy Hinman, Wendy Lowe, Lori McNamara, Spencer Gross

Thursday, September 22, 2005

Round Robin 1: Top Waste Disposition Issues for Each SSAB

Each board was given an opportunity to highlight current waste disposition issues facing the boards and sites.

Fernald

Final Disposition of Silos 1 and 2 waste.

- This waste is being stored at WCS, but final disposition is not yet assured.

Hanford

Plutonium

- There are concerns by the board about continued storage of plutonium which may take funding away from clean up

Mixed waste

- There is great uncertainty over use of Hanford for waste disposal from other sites

High level waste

- Hanford has not planned for storage of high level waste pending availability of a repository

Idaho

Yucca Mountain

- There is concern about the schedule and waste acceptance criteria for a repository
- The CAB is interested in whether DOE has contingency plans; long term interim storage is available for high level waste
- There is concern about capacity of Yucca Mountain and whether a second repository will be needed

Buried Waste

- Some of the buried waste retrieved may not be accepted at the Waste Isolation Pilot Plant (WIPP)

Special Nuclear Materials (SNM)

- SNM is being moved out of Idaho
- Proposals are being made for projects that could bring significant amounts of SNM to the site; one proposal involves consolidation of plutonium 238 production and fabrication of radioisotope power systems at Idaho

Nevada Test Site (NTS)

Transuranic (TRU) waste

- 'Small quantity' TRU waste sites such as NTS have a need for characterization and a schedule for disposal despite the small volume of waste

Funding

- NTS has a small level of funding relative to the other sites, but it is critical that its level of funding be maintained

Use of NTS by other sites

- There are many issues involved with availability of NTS as a disposal site for other DOE sites

Northern New Mexico

Expansion of Area G

- The disposal area is expanding by another 30 acres

- The CAB feels there is insufficient data to support disposal in unlined pits, trenches, and shafts
- The closure plans for the current site remain uncertain.

TRU waste to WIPP

- Characterization issues have impeded progress
- There is question whether pre-1970 TRU waste will stay buried or will go to WIPP

Future of Material Disposal Areas (MDA)

- There is a large volume of waste in MDAs without disposition paths
- Further waste is expected to be generated from decontamination and decommissioning (D&D)
- Instead of using new technologies, DOE continues to bury waste instead of rendering it inert

Oak Ridge

Orphan waste

- There is a volume of orphan waste that has no disposition path

TRU waste

- Oak Ridge has a high volume of remote handled waste
- The SSAB hopes to learn more about the status of a permit for TRU waste

Long term waste disposal availability

- There are several sites available, and private industry is playing a stronger role
- Continued availability is a concern

Paducah

Future Use of the On-Site Landfill

- Paducah has a subtitle D facility on site, but there are technical issues that may limit expansion
- Mixed low level waste goes to Envirocare in Utah

Excavation of Burial Grounds

- If the burial grounds are excavated, additional volumes of waste will need to be dealt with

D&D of Paducah

- There has not been planning for waste to be generated from D&D; about 1.3 million cubic yards of waste are expected to be generated
- The new landfill, even if available, will not be large enough

Rocky Flats

Rocky Flats has been remediated and there are no waste disposition issues

Savannah River

High Level Waste

- There are concerns about tank volume capacity
- DOE is pursuing a waste determination for the waste, and this may be a delay
- The vitrified high level waste is to go to Yucca Mountain; the release criteria proposed by EPA is being considered by the CAB

TRU waste

- Savannah River Site (SRS) has drums with high activity. It is not clear if this can be shipped to WIPP as is, if it can be shipped after repackaging, or whether it can be shipped at all
- SRS also has non drummed TRU and a new shipment container must be approved

Mixed waste

- SRS is tied to NTS in its plans to send mixed low level waste there

Question and Answers

SRS asked Idaho and Hanford to explain their issues with lack of storage for high level waste. Hanford explained that it did not have enough capacity. Idaho explained that it had storage for fuel but not for treated high level waste. Idaho also explained that the Navy is responsible for its fuel.

Oak Ridge commented that the waste volumes at issue were uncertain and questioned whether the group could rely upon available data.

SRS asked about the slow down of building the vitrification facility. An article in the paper indicated that new tanks may be needed. Hanford clarified that its board has not considered new tanks. The board is focused on the vitrification plant.

Fernald asked about a document called a business strategy. Oak Ridge received a copy, and it was distributed to each board. Some board members in attendance had not received the document.

Waste Disposition Strategies – Low Level and Mixed Low Level Waste

Christine Gelles provided a presentation on waste disposition strategies for low level waste (LLW) and mixed low level waste (MLLW). Her presentation included an update on the status of the LLW/MLLW program. She noted that record volumes of LLW/MLLW were disposed in Fiscal Year (FY) 2005, including most of the 'legacy' waste and large volumes of 'orphan' waste. She reviewed other activities that took place in FY 2005 to address waste disposition. SRS asked about the strategy to use rail transportation and expressed a concern about the quality of the rail system. Gelles replied that transportation is a concern and that EM monitors shipments and has a response team if needed. She agreed that sometimes the problem is with the rail system and not the shipper. SRS commented that the funding for NRC to support a waste determination at SRS is a concern. Gelles noted that the waste determination is a priority

for DOE HQ, and that they will address this issue if needed. Hanford asked how legacy waste is defined. Gelles replied that there is not a consistent definition of legacy waste. In some instances, it is defined as waste that is in storage but has not been disposed. Legacy waste is also defined as waste in existence before a new contractor comes on board. She commented that it generally refers to waste in storage that is ready for disposal. Oak Ridge commented that the TSCA incinerator is a valid facility, even though it may need to be upgraded. SRS stated that the 'gold metrics' used to report on waste disposition are not consistent across the DOE sites. The metrics also do not indicate if the funding is addressing a higher or lower risk activity. SRS commented that risk reduction should be a key factor in establishing a national strategy for waste disposition. NNM asked how the new data call for waste information from the DOE sites would be reviewed to assure it is complete and credible. Gelles replied that the data call focuses on clean up waste streams based on current cleanup plans of the sites. DOE is trying to build tools that will help them manage their wastes and that will also help with management of future waste volumes. SRS asked if the experts at the DOE sites were involved in the DOE HQ planning. Gelles replied that the experts in the fields were being used. The team working on the project includes members from the sites. Hanford asked what the schedule was for completion of the disposition maps. Gelles indicated that her office has an internal schedule that it tracks. Success in meeting the schedule will depend on the quality of the data received. She is planning to have the disposition strategies laid out by March 2006. Each strategy will be supported by a disposition map and data. SRS commented that the term 'cost efficiency' is misleading. Costs alone do not indicate if risk reduction has been achieved. Effectiveness is also a key. Oak Ridge noted that there are several companies coming to the site to process waste. NTS asked if the briefing could be available electronically. Melissa Nielson will post the briefing on the chairs web site. NNM noted that the CAB chairs had commented three years ago that the waste disposition maps needed to be updated, and it is good to see that this is being done. NNM also asked how the CABs would be involved in commenting on the strategies. Gelles replied that DOE was developing tools that could be responsive to public input. RFP asked if there was a chance that a workshop would be held. Gelles replied that once the tools were developed, it would be up to DOE upper management to decide. Paducah asked whether there was interest in scrap nickel being converted for re-use. Frank Marcinowski replied that DOE has received several letters from Congress expressing interest in re-use of the scrap nickel with the idea of putting any money received back into cleanup at Paducah. The Request for Proposal for cleanup at Paducah includes a request for contractors to make suggestions about how to deal with the nickel. SRS asked if DOE HQ has funding for its disposition strategy program. Gelles replied that there was funding and that the work was being done in large part by the federal employees. Resources have been available for support as needed. Fernald asked if its waste issues would be tracked once the Fernald site is transferred to the office of Legacy Management. Gelles replied that EM would be available as a resource to LM. EM will be responsible to track the silos to disposal. Gelles also demonstrated the web based approach being developed for the waste disposition maps.

Waste Disposition Strategies – TRU and High Level Waste

Frank Marcinowski provided a presentation on disposition strategies for TRU and high level waste. SRS asked how DOE defines the issue of gridlock. Marcinowski replied that gridlock means lack of needed resources as well as absence of a path forward. Hanford asked how TRU waste buried before 1970 is defined. Marcinowski replied that these issues have to be addressed on a site by site basis. Oak Ridge asked about plans for the permit modification for WIPP to allow WIPP to accept remote handled TRU. Marcinowski provided an update on the permit modification process. Rocky Flats commented that TRU waste generated pre-1970 is the same as that generated after that date and that it should be handled the same. Rocky Flats noted that there is a public perception that the waste is not distinguishable based on the date of generation. NNM commented that it appears there is no policy on pre-1970 TRU waste. Marcinowski noted that there are questions for each site to address in terms of how much to dig up and when. In Idaho, waste is being retrieved under a compliance agreement. SRS commented that an interaction between DOE, EPA, the state and the public is needed to decide how to disposition buried TRU. Idaho expressed concern that retrieved waste could not go to WIPP and asked if there was doubt over this. Marcinowski replied that not everything that is retrieved will need to go to WIPP if it is not TRU. Rocky Flats asked what 11(e)(2) waste is composed of. Marcinowski replied that this waste is composed of by-products from uranium processing. Marcinowski addressed concerns previously raised by NTS about classified waste and stated that this waste would be shipped out by the end of the year. NTS asked about drums that had not been assayed. Marcinowski replied that these may be the drums that had security issues and that the work would be completed. RFP asked if WIPP had the capacity for all the buried waste if it were dug up. RFP also asked about the types of transportation incidents encountered last year. Marcinowski provided additional details. NNM noted that a workshop on TRU had been held by the SSABs in February 2003. Marcinowski asked for the recommendations generated from the workshop. Gelles commented that realistic projections of waste to be retrieved are needed once plans are established by each site. This will generate better estimates of wastes involved in disposition planning. SRS commented that it has helped to move the SRS program along as a result of SRS agreeing to take waste from Mound. For every shipment received, 4 shipments of waste must leave SRS. SRS is interested in the same approach for waste currently in storage in Columbus, Ohio. Marcinowski did note that the waste from Columbus is remote handled and that it may not be a good fit for SRS. Idaho asked whether DOE had contingency plans if Yucca Mountain's opening is delayed. Marcinowski replied that DOE was looking at contingencies as far as delays. DOE assumes that Yucca Mountain will be available at some point in time. Delays will involve additional cost, and plans to put the high level waste in storage pending availability are still being followed. Gelles clarified that EM is not the office responsible for determining if an alternative to Yucca Mountain is needed. That is the responsibility of the Office of Civilian Radioactive Waste Management (RW). SRS asked if there is an integration of activities between EM and RW. Marcinowski replied that EM is working closely with RW on the license application to make sure that EM's needs are included. Idaho commented that the Idaho site has an empty facility that had been used to store special nuclear material and asked whether there were plans to use this facility for other site's waste, such as Hanford's plutonium. Marcinowski replied that there was some discussion being initiated about

these concepts. SRS commented that it was difficult to get information from DOE on plans for plutonium due to security issues. Marcinowski stated that when a strategy was developed it would not be a classified document. NNM asked if a workshop on these issues would benefit DOE. Marcinowski replied that a workshop could be focused on a specific waste type. The topic of waste disposition is a very broad category and may be difficult to handle. Hanford suggested that pre-1970 buried waste should be addressed programmatically across the complex. Marcinowski replied that he thinks this is underway. GAO is beginning to study pre-1970 TRU waste and this report may lead to action.

Communications Protocol

Melissa Nielson described the communications protocol proposed for communications between EM and the SSABs. NNM recommended that communications go to the support staff for the CAB and the DDFOs. Nielson expressed reluctance to send documents to support staff out of concerns about directing the contractors. Doug Frost suggested that each SSAB designate one person in addition to the chair and the DDFO. Paducah commented that the administrator should receive communications. It was determined that each board will submit their contact information to Nielson to be used for communications.

Next the communications from SSABs to EM was discussed. Nielson requested that any communications from SSABs to DOE-HQ include her office on distribution.

Hanford asked how integration with other groups involved in DOE issues would be accomplished. Frost responded that he is responsible for communications with several organizations that are involved with DOE issues such as the National Governors Association and the National Association of Attorneys General. He would like to involve more SSAB members in meetings with these other groups. Frost can also bring various groups together to meet. He would like to work with the SSABs to figure out how to involve them. As a first step, the SSABs will be informed of an upcoming meeting of the intergovernmental groups in November. Hanford asked to be provided a list of all upcoming meetings.

In response to a question from Paducah, Nielson explained the mission and make-up of the Environmental Management Advisory Board (EMAB). Oak Ridge commented that the EMAB had not been active in the last two years and that it was good to see that it was being revitalized. Fernald commented that the EMAB needs to be energized and that there would be benefit to interaction between EMAB and the SSABs.

Jay Vivari demonstrated how to find the EM SSAB web site (<http://web.em.doe.gov/public/ssab>).

Waste Disposition Issues Discussion

The participants identified waste disposition issues, possible solutions and how SSABs could help.

The issues are:

- pre-1970 TRU waste;
- Yucca Mountain;
- WIPP capacity/RH permit modification;
- SNM consolidation;
- tanks; and
- wastes with unknown paths.

Solutions identified by the group are:

- a comprehensive national strategy for pre-1970 TRU;
- DOE HQ commitment to make disposition decisions;
- technology development; and
- Board support for the RH permit.

An overarching concern is that adequate funding be assured to conduct waste disposition.

Ways that the SSABs can assist on these issues and solutions were identified:

- take a leadership role in public involvement;
- coordinate efforts with other national stakeholder groups;
- help identify a policy for pre-1970's TRU waste;
- share technology information;
- share lessons learned on waste disposition problems and solutions.

The group discussed what it should say to DOE. There is an opportunity to provide input by means of a response to two letters from DOE to the SSABs regarding waste disposition. Concerns were raised that the input not be too specific. Participants from Hanford, SRS and NNM will draft a proposed letter for the group to consider.

Friday, September 23, 2005

Top Issues of Each SSAB

Savannah River Site

Plutonium Storage/Disposition

- This is a major issue
- The other top issues of high level waste and TRU waste are similar to the issues presented as waste disposition issues

Rocky Flats Plant

Confidence in the Cleanup that has been completed

- The RFP board still has concerns about confidence in the cleanup
- It is important to present information on cleanup that is understandable to the general public
- RFP CAB has worked with a local company on a communications project to try to improve its communications

Future public participation

- It is not known how a Local Stakeholder Organization will be organized and whether it will include representation from the general public and opportunities for public participation

Loss of site expertise

- The CAB is concerned about loss of personnel who understand the site when regulatory closure activities are still scheduled

Paducah

The extended procurement process

- Paducah has experience significant delays in the selection of a new cleanup contractor
- There are concerns this will impact the pace of cleanup

Groundwater remediation

- There is uncertainty about the extent of groundwater remediation that will be undertaken beyond source removal

D&D of the site as it relates to reindustrialization

- DOE is studying whether contaminated property should be purchased and made available for reindustrialization

Oak Ridge

Site Cleanup

- Cleanup is going fairly well at the site. D&D of the East Tennessee Technology Park is an issue. Fissile material extraction may be a problem. Building K 25 also contains asbestos and other possible contaminants
- The buildings will be disposed in the on-site CERCLA waste facility
- Another concern is management of the CERCLA waste facility. The SSAB is concerned about how waste will be placed in the facility
- The SSAB is also involved in historical preservation issues

Stewardship

- There is concern about how long term stewardship will be conducted at sites that have on-going missions

Additional scope for EM at Y-12 and ORNL

- Congress did not favor the idea of transferring all activities outside of EM. Additional work by EM at the site is anticipated, but the extent is not certain.
- Another issue is the approach to verifying that cleanup has been completed so as to allow other activities at the site

Northern New Mexico

Protection of groundwater

- There is concern that the recently signed consent order between NMED and the site will be protective of groundwater
- Many wells have been installed on the site over the past 7 years. There are questions about the reliability and representativeness of samples taken from wells that are not flushed before samples are taken
- The Board has asked EPA to assist in evaluating this question

Funds available for cleanup under the consent order.

- Cleanup is expected to cost more than current planning budgets
- It is unrealistic to plan a completion date of 2015

Long term waste management strategy.

- The board hosted a forum on Area G, and one of the concerns of the public was the future of the pre-1970's TRU waste and whether it will be retrieved. NNM provided each chair with a CD that captures the proceeding of the forum
- Capacity for disposal of D&D waste is also a concern

Nevada Test Site

Groundwater monitoring

- 828 historical underground nuclear tests were conducted at NTS which resulted in some groundwater contamination.
- The CAB is involved in studying the plumes and the hydrogeologic properties of the site
- The CAB requested an independent peer review of DOE's plans, which DOE agreed to do
- DOE has invited the CAB to provide recommendations on well siting, and the CAB recommended three potential locations for future wells
- The CAB is preparing a comprehensive white paper, based upon three years of briefings and studies
- The CAB also provides status reports to interested stakeholders
- The CAB has a good working relationship with DOE

Funding

- The budget is small and any reduction would affect cleanup

Stakeholder involvement

- There will be a continuing need for stakeholder involvement as sites transfer from EM

Idaho

Tank closure

- The program is moving along but there are concerns about treatment of remaining liquid waste, whether the waste can go to WIPP, and how the soils will be cleaned up
- These problems should be solvable, but the CAB will be watching

Details of cleanup under a plan being formulated by the new cleanup contractor

- The CAB wants to make sure that what is left behind will be safe
- The CAB will focus on details related to buried waste and the plans for a facility for packaging and storing spent nuclear fuel

Long term plans for cleanup.

- The current contractor is focused on what it can complete by 2012
- Further cleanup activities will be needed after that time

Hanford

Cleanup of the central plateau area of the site

- This is the area where many hazardous operations took place
- The CAB has been trying to understand the issues
- One question is the risk assessments and NEPA documents used to make decisions on cleanup. The data may be insufficient, and errors in the data have been identified
- There are also inconsistencies between NEPA analyses, such as conflicts over groundwater flow and different assumptions about factors related to risk
- Delays in NEPA documents have also hampered the process
- The CAB is concerned about the impacts on waste treatment due to budget issues.
- DOE must address security issues due to a new threat basis that has been established, and cleanup workers are being laid off so security officers can be hired
- The tank waste is a major challenge. Costs are increasing on life cycle construction by about 100%, while funding is being reduced by about 10%. There are also challenges because the plant was built as it was being designed. This has required a lot of rework. The plant may not meet all the treatment standards needed for the waste
- All the contracts on the central plateau will be completed by the end of next year, and the CAB hopes that DOE is working on a plan to replace these contractors
- The board is concerned that real cleanup will stall at the site

Fernald

Natural Resource Damages

- Fernald's top issue is settlement of a natural resource damages claim
- A court date is set on a law suit in 2006

Transition of the site from EM to Legacy Management (LM) in April 2006

- There are concerns about data, institutional knowledge, and transition of the CAB to a local stakeholder organization (LSO)

- There is fear that the public participation process will be lost. The CAB is working through these issues and will have more to report at the next meeting

Group Review of Draft Letter regarding Waste Disposition Issues

The group reviewed a letter drafted to send to EM-1 and made some changes. They discussed the concerns of the NTS CAB that a high level waste repository is outside of that CAB's charter. The letter was revised and the chairs agreed to provide the letter to their respective CABs and seek their approval to sign the letter.

Long Term Stewardship

David Kipping, Chair of the Idaho CAB, provided a presentation on long term stewardship at the Idaho site. He related that the CAB had been involved with the issue for several years and had early input to the development of the plans for long term stewardship at Idaho. Mark Shaw, DOE-ID, provided a presentation on the INL Site's Long Term Stewardship Program. Oak Ridge asked how Idaho was funding its activities. Shaw replied that many of the activities are related to requirements in Records of Decision (RODs). Kipping commented that it is funded by EM until cleanup is completed. Then the program will become the responsibility of the Office of Nuclear Energy (NE). Oak Ridge commented that it was a good idea to have a program in place before cleanup is completed.

Next Chairs Meeting

Oak Ridge volunteered to host the next chairs meeting in April 2006. One topic of interest will be the national disposition strategy for LLW/MLLW if the document is available by then. The meeting may be extended to address this topic. Shelly Cimon, J.D. Campbell, Ken Korkia, Jerry DePoorter, Doug Frost, Melissa Nielson, Norman Mulvenon, and Paducah volunteered to assist on formulating the agenda for the meeting. One or two Oak Ridge support staff members will also help. NNM volunteered to host the chairs meeting in the fall of 2006.

Public Comment

Jay Vivari commented that he will retire next week and stated it has been an honor and a privilege to work with the boards.

DOE Organizational Update

Melissa Nielson noted that the top management at EM were now in place. The DOE funding for FY 2006 will be covered under a continuing resolution until Congress acts. Beginning with the 2007 budget for EM, it will be broken down by DOE site. She noted that EM-1 would like to attend the next chairs meeting in Oak Ridge if his schedule allows.

Norm Mulvenon asked DOE to clarify a recent letter that indicated that the chairs recommendations on public participation from the last meeting were outside the scope of the SSAB charter. Doug Frost indicated that the SSAB charter is to provide advice on EM issues. The recommendations on public involvement extended beyond the office of

EM to other offices within DOE. Thus, DOE viewed the recommendations as beyond the scope of EM. Nielson stated that the EM program wants the CABs to stay focused on EM issues.